

Family Support on Contraceptive Use in the Coastal Slums Area in Medan, North Sumatra, Indonesia

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Track Record Article
Accepted : 10 December 2022
Publication: 20 December 2022

Abstract

The use of contraception can prevent the risk of death for both mother and infant due to unplanned pregnancy. This study measures adult women's knowledge, attitudes, and behavior in contraceptive use in coastal slums. Knowledge, attitudes, and behaviors are supported by supporting factors and driving factors at the mother's household level. This research used a multilevel analytical with a cross-sectional approach. Adult women (individual levels) and heads of the family (family level) are subject in this study, separated into two groups in the individual and household unit. The total sample in this study is 734 samples and originated from 374 samples in individual and household units. The results of this study indicate that maternal knowledge about contraception and mother's education has a positive effect on contraceptive use, as well as husband's support and economic status. Women with an elementary and junior high school education tend not to use contraception 3-5 times more than women with higher education.The family variation between environments binds 26% of the results to the existing multilevel analysis so that contributions made by intervening risk factors at the family level will increase participation in individual contraceptive use by 26%. Supporting factors for mothers in using contraception influence the support of their husbands and family support. Elementary and junior high school education still dominantly influence contraception in adult women in first and second models. Women with primary and junior secondary education tend not to use contraception three to five times more than the group of women who have higher education. Contributions that can be made by intervening risk factors at the family level will increase the participation of contraceptive use in individuals by twenty-six percent.

Keywords: *Contraception, Family Support, Slum Area.*

INTRODUCTION

Issues relating to public health in slums still needs serious attention since the slum areas are synonymous with high levels of poverty, poor infrastructure and access to inadequate sanitation facilities, and lack of basic facilities (Zulu et al., 2002);(Ainy et al., 2021); (Safitri, 2016) . Besides, slum residents also face other challenges such as unemployment, crime, poor school facilities, premature sexual behavior, and low level of contraceptive use (Creanga et al., 2011); (Tappis et al., 2015); (Setiasih et al., 2016).

Belawan sub-district is a poor slum area in the coastal city of Medan, North Sumatra Province. Based on the Decree of the Mayor of Medan No.640/039.K/I/2015, the slum area in Belawan sub-district is 26.25 km^2 or 9.9% of the total slum area in Medan City. Besides being designated as a coastal slum area in the district there, Belawan sub-district became one of the most important ports on the island of Sumatra as it pertains to transport humans and cargo/goods. Therefore, Belawan sub-district is one of the leading destinations for migration in North Sumatra (Lumbantoruan et al., 2017) . Migration destination areas usually face many problems, such as population growth that results in dense residential areas and unmet basic needs(Lumbantoruan et al., 2017); (Syawalina, 2020). This condition adds to the complexity of people's lives in the region, including dealing with various health-related problems.

In general, the incidence of unwanted pregnancy in North Sumatra Province itself is pretty high. Based on secondary data analysis results from the 2017 Indonesian Demographic and Health Survey (IDHS), 10.6% of pregnancies in this province were identified as Unwanted Pregnancies. This figure is the fourth highest number in the Indonesian region (Arsyad, 2016); (Sitorus, 2020). Jaeni et al., (2009) stated that unwanted pregnancies in Indonesia often occur in women who have very close delivery intervals, have many children, and disagree with their husbands about the number of children they want. They also have low socioeconomic status who cannot obtain or have difficulty accessing contraceptive services, and older women who do not want more children (Jaeni et al., 2009); (Sitorus, 2021); (Mawarni, 2016); (Fitrianingsih & Melaniani, 2017). From research conducted by Mohamed et al., (2019) in Egypt, it is known that 64% of the women who were respondents in their study and experienced an unwanted pregnancy did not use any contraception. Meanwhile, the incidence of unwanted pregnancy is also commonly found in urban areas where access to contraceptive services is not a problem (Mohamed et al., 2019); (Nurwita, 2019); (Chukwuji et al., 2018); (Gonie et al., 2018).

A study conducted in New York, United States, found that unwanted pregnancy prevalence in poor urban areas is caused by low income and vulnerability to exposure to risky behavior living in poor urban environments such as drinking alcoholic habits (Besculides & Laraque, 2004). Correspondingly, Foster et al., (2004) also found that the chances of having an unwanted pregnancy increase with lower income because women with low incomes tend not to use contraception. Thus, contraception is one crucial factor contributing to the incidence of unwanted pregnancy .

The use of contraception is not solely influenced by the acceptor's knowledge, attitudes, and behavior but is also influenced by family and environmental support. Individual health behavior is often mediated by beliefs and norms in the community so that individual behavior is much influenced by the community's perception about the individual's actions (Stephenson & Hennink, 2005). Family support is one of the reinforcing factors that significantly impact a person to behave positively and affect the development and progress of family planning programs (Puspitasari & Nurunniyah, 2016); (Setyaningrum & Melina, 2017).

Ideally, contraception is a joint responsibility of husband and wife as a couple, so that the method of contraception chosen reflects the needs and desires of husband and wife. Husband and wife partners must support each other in selecting and using contraceptive methods because reproductive health, especially family planning, is not only a matter of husband or wife (Anggraeni & Permana, 2007); (Mahmudah & Indrawati, 2015); (Nurjannah, 2017); (Weni, 2019). The low support of men in the selection of contraceptive methods, among others, is caused by age, education, parity, economic level, knowledge, attitudes, cultural values, health services, the behavior of community leaders, and the ability to obtain information on family planning services and reproductive health (Fitrianingsih & Melaniani, 2017); (Mustafa et al., 2015)

Considering that urban areas are associated with poverty which affects the community's behavior in contraception, it is necessary to conduct research that examines the causal relationship between family support in contraceptive use. Limited information about family support in contraceptive use in poor coastal slums is also one background why this research needs to be done. It is hoped that this research can impact the development of the Family Planning Program based on the family approach so that in the end, the Unwanted Pregnancy rate in this region in particular, and North Sumatra, in general, can be reduced.

METHOD

Study setting

This study location was in Medan Belawan sub-district, Medan, North Sumatera Province, Indonesia, which was identified as a slum area in the coastal of Medan. Medan is the capital city of North Sumatera Province, the largest city in the Sumatera Island or western part of Indonesia. The number of family blocks in the research area is estimated at around 3,500 people per km^2, with the number of populations living at the lowest economic level is about 15,000 people. This sub-district consists of six villages which were the primary sampling unit of this study.

Participants

A cross-sectional study was conducted to investigate the association between family support and contraceptive use. Multistage cluster random sampling was used to select the group. The primary sampling unit of this study was the Medan Belawan sub-district, and the second stage of this multistage sampling was villages which consisted of 6 villages in this sub-district. We have chosen the smallest administrative area, "Lingkungan," or well known in Indonesia as "Rukun Tetangga," as a primary cluster of this study, of 143 clusters, and only 60 clusters have been chosen to participate in this study. Sixty groups were randomly selected from the list of Medan Belawan sub-district provided by the family planning cadres in each village. Then, six families were randomly selected from each cluster. In total, 734 subjects agreed to participate in this study, consisting of 367 adult women and 367 heads of the family.

Adult women (individual levels) and heads of the family (family level) are subjects in this study separated into two groups in the individual and household units. Adult women who lived in the study area with their husbands for more than six months and were aged 15-30 had participated in this study as an individual unit. All subjects in each group agreed to participate in this study. The household level is included the head of a family member that was mainly the husband of adult women, married for more than a year, and had agreed to participate in this study. we excluded ten subjects due to head of the family was not in the house during the interview. This study was obtained ethical approval from the Health Research Ethics Committee of Islamic University of Sumatera Utara (No.009/EC/KEPK.UISU/X/2019).

Instruments

We adopted the research instrument from the 2017 Demography and Health Survey (DHS). The data of education level, knowledge, attitude, and behavior of contraceptive, socio-economy level, husband, and family support were obtained using the questionnaire. The first part of the questionnaire consisted of socio-demographic characteristics, including sex, age, education level, occupation status, and economic status. We considered the financial situation in terms of family income, housing status, and ownership of electronic goods. The second part of the questionnaire included questions on used a contraceptive method or ever used a contraception, but at the same time of the study did not use any method temporarily due to pregnancy planning. This part also asked the subject about methods used by women and the duration of contraceptive use. The third part consisted of knowledge and attitude towards contraceptives methods among adult women in this study

area. The questions explored the basic knowledge and stigma about contraceptives among families and husbands. The fifth part consisted of questions to explore family support of contraceptive use and availability to support a wife in contraceptive use.

Data Analysis

Statistical analysis in this study was deployed with categorical data and multilevel analysis. The characteristics of adult women and husbands were compared with a chi-square test with significant statistics that was set at less than 5% (p-value<0.05). The second model of multilevel analysis has been adjusted with social-economy status. We performed statistical analysis with IBM SPSS statistics for windows version 21 (IBM, Armonk, NY).

RESULT

The percentage of adult women who used contraception was 273 adult women (74.4%), and those who did not use contraception amounted to 94 adult women (25.6%). The variables studied to describe adult women with elementary education of 67 adult women (18.4%), not working or as housewives of 340 adult women (92.6%), low knowledge of 185 adult women (50,4%), negative attitudes of 190 (51.8%) and the opinions of mothers in support of husbands who fully support of 194 adult women (52.9%).

In total, 367 heads of family participated in this study. The variables studied described 57 families (15.5%) of family heads only attained primary education level, 233 family heads employed as entrepreneurs (63.5%), support for contraception use in full support of 237 households (64.6%), and the socioeconomic status of the family based on the most group in group 3 namely 234 houses (63.8%).

Tabel 1. Frequency Distribution Based on Characteristics of Woman of Childbearing Age in The Coastal Slums Area

Variable		N	%
Use of contraceptive	Yes	273	74,4
	No	94	25,6
Women of childbearing age			
Level of education	Elementary school	67	18,4
	Junior High School	97	26,6
	Senior High School	176	48,2
	College	25	6,8
Occupation	Housewife	340	92,6
	Civil Servants	5	1,4
	Army/Police	1	0,3
	Entrepreneur	21	5,7

Variable		N	%
Knowledge	Low	185	50,4
	High	182	49,6
Attitude	Negative	190	51,8
	Positive	177	48,2
Husband's support	Partial Support	173	47,1
	Full Support	194	52,9
Head of family			
Level of education	Elementary school	57	15,5
	Junior High School	96	26,2
	Senior High School	199	54,2
	College	15	4,1
Occupation	Employee	41	11,2
	Entrepreneur	233	63,5
	Fisherman	93	25,3
Family support	Partial Support	130	35,4
	Full Support	237	64,6
Social economy	Group 1 (Lowest)	20	5,4
	Group 2	95	25,9
	Group 3	234	63,8
	Group 4 (Highest)	18	4,9

In adult women, statistical test results show that contraceptive use is significantly influenced by adult women's husbands' education level and support. However, based on the knowledge and attitudes of adult women, they statistically do not show a significant relationship in the use of contraception in adult women. At the household head level, statistical test results show that contraceptive use is significantly influenced by family support and the socioeconomic head of the family. However, the household head's occupation did not establish a significant relationship in contraceptive use.

Table 2. Analysis of The Relationship of Contraceptive Use of Woman of Childbearing Age in The Coastal Slums Area

Variable	Contraceptive						P-value
	No		Yes		Total		
	N	%	N	%	N	%	
Adult women							
Level of education							
Elementary school	10	14,9	57	85,1	67	100	
Junior high school	18	18,6	79	81,4	97	100	
Senior high school	54	30,7	122	69,3	176	100	0,004*
College	11	44,0	14	56,0	25	100	

Variable	Contraceptive						P-value
	No		Yes		Total		
	N	%	N	%	N	%	
Knowledge							
Low	54	29,2	131	70,8	185	100	0,144
High	40	22,0	142	78,0	182	100	
Attitude							
Negative	55	28,9	135	71,1	190	100	0,163
Positive	39	22,0	138	78,0	177	100	
Husband's support							
Partial	55	31,8	118	68,2	173	100	0,015*
Full	39	20,1	155	79,9	194	100	
Head of family							
Level of education							
Elementary school	11	19,3	46	80,7	57	100	0,0001*
Junior high school	11	11,5	85	88,5	96	100	
Senior high school	65	32,7	134	67,3	199	100	
College	7	46,7	8	53,3	15	100	
Occupation							
Employee	16	40,0	24	60,0	40	100	0,107
Entrepreneur	56	24,1	176	75,9	232	100	
Fisherman	21	22,8	71	77,2	92	100	
Family support							
Partial	48	36,9	82	63,1	130	100	0,0001*
Full	46	19,4	191	80,6	237	100	
Social economy							
Group 1	5	25,0	15	75,0	20	100	0,009*
Group 2	17	17,9	78	82,1	95	100	
Group 3	61	26,3	171	73,7	232	100	
Group 4	10	58,8	7	41,2	17	100	

*Significant p-value < 0,05

Based on multilevel statistical analysis, it is known that the influence of husband's support significantly influences the use of contraception in adult women at the level of the group of adult women itself. In model 2, involving the influence of family in contraception, it is known that the effect of family support is more dominant in influencing the use of contraception in adult women than husband support. Elementary and junior high school education dominate contraception in adult women in models one and model 2. Women with an elementary and junior high school education tend not to use contraception 3-5 times more than women with higher education. The family variation between environments binds 26% of the results to the existing multilevel analysis so that contributions made by intervening risk factors at the family level will increase participation in individual contraceptive use by 26%.

Table 3. Multilevel Modelling of Risk of Contraceptive Use

Variable	Model 1		Model 2	
	AOR	95%CI	AOR	95%CI
Adult women				
Education				
Elementary school	4,533*	1,588-13,052	3,773*	1,278-11,139
Junior high school	3,438*	1,32-8,957	2,250*	1,027-7,364
Senior high school	1,674	0,705-3,976	1,451	0,595-3,536
College	Reff	Reff	Reff	Reff
Husband's support				
Partial	0,544*	0,334-0,884	0,806	0,956-1,425
Full	Reff	Reff	Reff	Reff
Knowledge				
Low	0,66	0,405-1,075	0,691	0,413-1,144
High	Reff	Reff	Reff	Reff
Family				
Social economy				
Group 1			4,809*	1,1-21,03
Group 2			5,950*	1,87-1,887
Group 3			3,884*	1,355-11,128
Group 4			Reff	Reff
Family support				
Partial			0,43*	0,74-0,76
Full			Reff	Reff
Random variance				
Log-likelihood	51,438		1,702,278	
Intraclass correlation	0,288		0,264	

*Significant p-value < 0,05

DISCUSSION

The use of contraception in adult women found in the slums of the coastal city of Medan shows a significant relationship between the education variable and husband's support for contraceptive use. The results of this study align with research by Karim et al (2021) that the higher the level education was associated with more knowledge and rational in making various decisions. Therefore, there is a statistically significant difference in knowledge about contraception between people interviewed with multiple levels of education, the essential difference observed between those interviewed with primary education and higher education (x^2 = 57.0; p <0.00001). According to Anggraeni & Permana, (2007), the level of education also affects the individual's desire to use contraceptives. Research in Kenya shows that highly

educated respondents have a significantly higher chance of supporting their wives to use contraception than respondents with low education, while respondents with no education have very little chance of receiving the information provided (Zulu et al., 2002). Low education also makes respondents less able to accept and understand family planning counseling offered by family planning officers, thus hampering information about family planning (Radulović et al., 2006).

The husband's support is significant for the wife, especially in planning household life and determining the use of contraception. The use of contraception is inseparable from the husband's consent because the husband is the first and foremost person in providing support and attention to a husband towards his wife (Bobak et al., 2005); (Novianty, 2016). The results of this study are in line with WHO (2007), which states that a partner's relationship is a factor that determines the choice of using contraceptives. Because in many societies, couples do not communicate about family planning, women often must obtain and use contraceptives if they want to control their fertility. Study in India and Turkey shows that more than half of the women interviewed said that their contraception is going well caused by full support from their husbands. The same study found that the agreement of friends or relatives on contraceptive use was important for 91% of women in Turkey, 68% in the Philippines, 67% in India, and 54% in the Republic of Korea (Tabassum et al., 2016).

The results of this study are also in line with research conducted by Gonie et al., (2018) which shows that high husband support will influence maternal behavior in using contraception. The results of this study are also in line with the research of Prata, (2017), which states that the use of contraception in women depends on their husband's approval/support. At the head of a household level, the use of contraception in adult women found in the slums of the coastal city of Medan showed a significant relationship between the variables of knowledge and the social level of contraceptive use. The results of this study are in line with the research of Islam et al., (2004), which states that husbands gain knowledge of contraception during reproduction through their experiences, and the level of husband's knowledge about family planning can be influenced by their educational status, age, and duration of the marriage. The longer the marriage age, the more husband knows about family planning compared to those who have just married. This shows that the level of knowledge is one factor that significantly influences a person's participation, especially couples of childbearing ages in family planning (Setiasih et al., 2016). So that the greater a person's level of knowledge about the benefits of family planning, the greater a person's motivation for family planning (Srivastava et al., 2005).

CONCLUSION

From various results of data analysis and discussion of the findings in the study, it can be summarized that the use of contraception in adult women has a significant influence on adult women in using tools contraception education, knowledge, and support of husbands. Likewise, the husband's work and family economic status significantly influenced adult women using contraception. In multilevel modeling, it is known that the influence of family support is more dominantly affecting contraceptive use in adult women compared with the husband's consent. Elementary and junior high school education still dominantly influence contraception in adult women in first and second models. Women with primary and junior secondary education tend not to use contraception three to five times more than the group of women who have higher education. Contributions that can be made by intervening risk factors at the family level will increase the participation of contraceptive use in individuals by twenty-six percent.

ACKNOWLEDGEMENT

The author would like to thank all cadres of the Village Belief Family Planning (PPKBD) Medan Belawan sub-district who took part in this study. Thanks to the Population and Family Planning Board of Medan City and North Sumatra Province for their support and cooperation in conducting research. Thanks also to the Center for Research and Development of Family Planning and Family Welfare (PUSNA) National Population and Family Planning Agency (BKKBN) for funding for the entire duration of research.

REFERENCES

Ainy, F. N., Susanto, T., & Susumaningrum, L. A. (2021). The relationship between environmental sanitation of family and stunting among under-five children: A cross-sectional study in the public health center of jember, indonesia. *Nursing Practice Today*, *8*(3), 173–178. https://doi.org/10.18502/npt.v8i3.5932

Anggraeni, M. D., & Permana, R. H. (2007). Peran Suami Dalam Penggunaan Alat Kontrasepsi Yang Berwawasan Gender. *Soedirman Journal of Nursing*, *2*(2), 73–81.

Arsyad. (2016). Determinan Fertilitas di Indonesia. *Jurnal Kependudukan Indonesia*, *11*(1), 1–10.

Besculides, M., & Laraque, F. (2004). Unintended Pregnancy among the Urban Poor. *Medicine*, *81*(3). https://doi.org/10.1093/jurban/jth122

Bobak, I. M., Lowdermilk, D., & Jensen, M. (2005). *Buku ajar keperawatan maternitas*. EGC.

Chukwuji, C. N., Gadanga, A. T., Sule, S., Zainab, Y., & Zakarriya, J. (2018). Awareness,

access and utilization of family planning information in Zamfara State, Nigeria. *Library Philosophy and Practice*, *2018*.

Creanga, A. A., Gillespie, D., Karklins, S., & Tsui, A. O. (2011). Low use of contraception among poor women in Africa: an equity issue. *Bull World Health Organ*, *89*, 258–266.

Fitrianingsih, A. D. R., & Melaniani, S. (2017). Faktor Sosiodemografi yang Memengaruhi Pemilihan Metode Kontrasepsi. *Jurnal Biometrika Dan Kependudukan*, *5*(1), 10. https://doi.org/10.20473/jbk.v5i1.2016.10-18

Foster, D. G., Bley, J., Mikanda, J., Induni, M., Arons, Abigail Arons -Baumrind, N., Darney, P. D., & Stewart, F. (2004). Contraceptive use and risk of unintended pregnancy in California Diana. *Elsevier*, *70*(1), 31–39. https://doi.org/10.1016/j.contraception.2004.01.012

Gonie, A., Wudneh, A., Nigatu, D., & Dendir, Z. (2018). Determinants of family planning use among married women in bale eco-region, Southeast Ethiopia: A community based study. *BMC Women's Health*, *18*(1). https://doi.org/10.1186/s12905-018-0539-7

Islam, M., Padmadas, S., & Smith, P. (2004). Degree and determinants of men's contraceptive knowledge in Bangladesh. *British Society for Population Studies Annual Conference*.

Jaeni, N., McDonald, P., & Utomo, I. D. (2009). Determinants of Unintended Pregnancy among Ever-Married Women in Indonesia: An Analysis of the 2007 IDHS. *Australian Demographic and Social Research Institute*.

Lumbantoruan, W., Simanungkalit, N. M., & Pinem, M. (2017). Analisis Migrasi Penduduk di Kelurahan Bagan Deli Kecamatan Medan Belawan Kota Medan. *Jurnal Pendidikan Ilmu-Ilmu Sosial*, *9*(1), 34–41. https://doi.org/doi.org/10.24114/jupiis.v9i1.6458

Mahmudah, L. T. N., & Indrawati, F. (2015). Analisis Faktor Yang Berhubungan Dengan Pemilihan Metode Kontrasepsi Jangka Panjang (MKJP) Pada Akseptor Kb Wanita Di Kecamatan Banyubiru Kabupaten Semarang. *Unnes Journal of Public Health.*, *4*(3), 76–85. https://doi.org/10.15294/ujph.v4i3.7222

Mawarni, A. (2016). Hubungan Persepsi Akses Dan Pelayanan KB dengan Kejadian Unmet. *Jurnal Penelitian Kesehatan Suara Forikes*, *7*(1), 32–38.

Mohamed, E. A.-E. B., Hamed, A. F., Yousef, F. M. A., & Ahmed, E. A. (2019). Prevalence, determinants, and outcomes of unintended pregnancy in Sohag district, Egypt. *Journal of the Egyptian Public Health Association*, *94*(1). https://doi.org/10.1186/s42506-019-0014-9

Mustafa, G., Azmat, S. K., Hameed, W., Ali, S., Ishaque, M., Hussain, W., Ahmed, A., & Munroe, E. (2015). Family Planning Knowledge, Attitudes, and Practices among Married Men and Women in Rural Areas of Pakistan: Findings from a Qualitative Need Assessment Study. *International Journal of Reproductive Medicine*, *2015*, 1–8. https://doi.org/10.1155/2015/190520

Novianty, H. (2016). Analisis Dukungan Suami Terhadap Jumlah Anak Ideal. *Jurnal Ners Dan Kebidanan*, *3*(1), 13–27.

Nurjannah. (2017). Determinan Kejadian Drop Out Penggunaan Kontrasepsi Pada Pasangan Usia Subur (PUS) Di Kabupaten Kuningan. *Jurnal Ilmu Kesehatan Bhakti Husada: Health Sciences Journal*, *6*(2), 1–9.

Nurwita, A. (2019). Hubungan Karakteristik Ibu dan Dukungan Suami dengan Rencana Metode Kotrasepsi Pasca Persalinan pada Ibu Trimester III di Puskesmas Cibeureum Kota Cimahi Ati Nurwita. *The 1 Proceeding Publication of Creativity and Research Medical Laboratory Technology DIV*, *1 (1)*, 29–34.

Prata, N. (2017). Partner Support For Family Planning and Modern Contraceptive Use in Luanda, Angola. *African Journal of Reproductive Health*, *21*(2), 35–45. https://doi.org/doi.org/10.29063/ajrh2017/v21i2.5

Puspitasari, D., & Nurunniyah, S. (2016). Dukungan Keluarga dalam Keikutsertaan KB pada Pasangan Usia Subur di Desa Argomulyo Sedayu Bantul Yogyakarta. *Jurnal Ners Dan Kebidanan Indonesia*, *2*(3), 93–98. https://doi.org/10.21927/jnki.v2i3.102

Radulović, O., Šagrić, C., Višnjić, A., Tasić, A., & Marković, R. (2006). The influence of education level on family planning. *Medicine and Biology*, *13*(1), 58–64.

Safitri, W. R. (2016). Pearson correlation analysis in determining the relationship between the incidence of dengue hemorrhagic fever and population density in the city of Surabaya in 2021-2014. *Journal of Public Health*, *16*, 21–29.

Setiasih, S., Widjanarko, B., & Istiarti, T. (2016). Analisis Faktor-faktor yang Mempengaruhi Pemilihan Metode Kontrasepsi Jangka Panjang (MKJP) pada Wanita Pasangan Usia Subur (PUS) di Kabupaten Kendal Tahun 2013. *Jurnal Promosi Kesehatan Indonesia*, *11*(2), 32. https://doi.org/10.14710/jpki.11.2.32-46

Setyaningrum, N., & Melina, F. (2017). Faktor-Faktor Yang Berhubungan Dengan Keikutsertaan Suami Menjadi Akseptor Kb Di Desa Sumber Agung Jetis Bantul. *Jurnal Kesehatan Samodra Ilmu*, *8*(1), 137722.

Sitorus, M. A. (2020). Analisis Preferensi Jumlah Anak Ideal di Provinsi Sumatera Utara (Analisis Data Skunder SDKI 2017). *Contagion : Scientific Periodical of Public Health and Coastal Health*, *2*(2), 87–98. https://doi.org/10.30829/contagion.v2i2.7989

Sitorus, M. A. (2021). Pengaruh Frekuensi Media dan Keterpaparan Informasi tentang KB terhadap Persepsi Jumlah Anak Ideal: Analisis Data SDKI 2017. *Jurnal Kesehatan*, *14*(1), 84–94. https://doi.org/10.24252/kesehatan.v14i1.16929

Srivastava, R., Srivastava, D. K., Jina, R., Srivastava, K., Sharma, N., & Sana, S. (2005). Contraceptive knowledge, attitude and practice (KAP Survey). *J Obstet Gynecol India*, *55*(6), 546–550.

Stephenson, R., & Hennink, M. (2005). Barriers to family planning service use among the urban poor in Pakistan. *Asia-Pacific Population Journal*, *19*(2), 5–26. https://doi.org/10.18356/e54a6ab6-en

Syawalina. (2020). *Determinan Faktor Terjadi Kehamilan Akibat Unmet Need KB pada Ibu Hamil di Puskesmas Binjai Kota Tahun 2019*. Universitas Sumatera Utara.

Tabassum, A., Manj, Y. N., Gunjial, T. R., & Nazir, S. (2016). Perceptions of rural women about contraceptive usage in district Khushab, Punjab. *JPMA*, *66*(1577–81).

Tappis, H., Kazi, A., Hameed, W., Dahar, Z., Ali, A., & Agha, S. (2015). The Role of Quality Health Services and Discussion about Birth Spacing in Postpartum Contraceptive Use in Sindh, Pakistan: A Multilevel Analysis. *PLoS One*, *10*(10). https://doi.org/http://dx.doi.org/10.1371/journal.pone.0139628

Weni, L. (2019). Determinan Pemilihan Metode Kontrasepsi Jangka Panjang Pada Akseptor KB Aktif di Puskesmas Pedamaran. *Contagion : Scientific Periodical of Public Health and Coastal Health*, *1*(1), 9–16. https://doi.org/10.30829/contagion.v1i01.4819

Zulu, E. M., Dodoo, F. N. A., & Chika-Ezeh, A. (2002). Sexual risk-taking in the slums of Nairobi, Kenya, 1993-98. *Population Studies*, *56*(3), 311–323. https://doi.org/10.1080/00324720215933